WHAT IS CLAIMED IS:

1. An image processing method of making luminance correction on the basis of a luminance histogram showing distribution of a luminance level of image data, comprising the steps of:

obtaining a luminance average value in said luminance histogram and a peak distance showing a distance between peaks in said luminance histogram;

comparing a distribution discrimination value which can discriminate whether a distribution deviation of the luminance level exists on a low luminance side or a high luminance side in said luminance histogram or not with said distance between the peaks, thereby discriminating whether said image data is data of a backlight image or not on the basis of a result of said comparison; and

comparing said luminance average value with an exposing state discrimination value which can discriminate the exposing state, thereby discriminating whether said image data is data of an image other than the backlight image or not.

2. An image processing method of making luminance correction on the basis of a luminance histogram showing distribution of a luminance level of image data in which an image is expressed by a numerical value, comprising the steps of:

obtaining a luminance average value in said luminance histogram, a luminance standard deviation indicative of a degree of dispersion of luminance distribution from said luminance average value, and a peak distance showing a distance between peaks in said

luminance histogram;

comparing a distribution discrimination value which can discriminate whether a distribution deviation of the luminance level exists on a low luminance side or a high luminance side in said luminance histogram or not with the obtained peak distance,

comparing a halftone presence/absence discrimination value which can discriminate whether the distribution deviation of the luminance levels does not exist in a halftone in said luminance histogram or not with the obtained standard deviation, thereby discriminating whether said image is a backlight image or not on the basis of results of said comparisons; and

comparing each of said luminance average value and said luminance standard deviation by using an exposing state discrimination value which can discriminate the exposing state, thereby discriminating an exposing state of an image other than the backlight image.

3. The image processing method according to claim 2, wherein in said image process, luminance correction according to a backlight process to the backlight image, an under-exposure process to an under-exposure image, an over-exposure process to an over-exposure image, and a standard exposure process to a standard exposure image is made in accordance with the exposing state of said image.

4. The image processing method according to claim 2, wherein in said under-exposure process, in a histogram of said

under-exposure image, said histogram is stretched in accordance with the histogram of said under-exposure image so as to shift the luminance average value existing on the low luminance side toward a predetermined value of said histogram.

5. The image processing method according to claim 3, wherein in said over-exposure process, in a histogram of said over-exposure image, said histogram is stretched in accordance with the histogram of said over-exposure image so as to shift the luminance average value existing on the high luminance side toward a predetermined value of said histogram.

6. The image processing method according to claim 3, wherein in said standard exposure process, in a histogram of said standard exposure image, the luminance average value is shifted toward a predetermined value in accordance with said histogram.

7. The image processing method according to claim 3, wherein in said backlight process, a histogram of said backlight image is divided into halves, the histogram on said low luminance side is stretched in accordance with the histogram of said backlight image so as to shift the luminance average value existing on the low luminance side toward a predetermined value, and the histogram on said high luminance side is stretched in accordance with the histogram of said backlight image so as to shift the luminance average value existing on the high luminance side toward said predetermined value.

8. The image processing method according to claim 6, wherein in said backlight process, contacts where the histogram on said low luminance side and the histogram on said high luminance side have been respectively stretched are smoothly shown by using a three-dimensional function.

9. The image processing method according to any one of claims 4 to 7, wherein said predetermined value is an intermediate value in the histogram.

10. The image processing method according to claim 2, wherein prior to discriminating said exposing state, whether said image data is artificially formed image data or not is discriminated, and if it is determined that said image data is the artificially formed image data, the luminance correction is not made to said image data.

11. The image processing method according to claim 2, wherein if it is determined that said image data is a part of a series of image data constructed by a plurality of data, said image process is executed to the image data obtained by collecting a series of image data.

12. An image processing apparatus for making luminance correction on the basis of a luminance histogram showing distribution of a luminance level of image data in which an image is expressed by a numerical value, comprising:

a luminance average value obtaining unit which obtains a

luminance average value in said luminance histogram;

a luminance standard deviation obtaining unit which obtains a luminance standard deviation indicative of a degree of dispersion of luminance distribution from said luminance average value in said luminance histogram;

a peak distance obtaining unit which obtains a distance between peaks of luminance level distribution in said luminance histogram;

an exposure discriminating unit which compares a distribution discrimination value which can discriminate whether a distribution deviation of the luminance level exists on a low luminance side or a high luminance side in said luminance histogram or not with the obtained peak distance, compares a halftone presence/absence discrimination value which can discriminate whether the distribution deviation of the luminance levels does not exist in a halftone in said luminance histogram or not with the obtained standard deviation, discriminates whether said image is a backlight image or not on the basis of results of said comparisons, and compares each of said luminance average value and said luminance standard deviation by using an exposing state discrimination value which can discriminate the exposing state, thereby discriminating an exposing state of an image other than the backlight image; and

a correction processing unit which makes the luminance correction on the basis of a result of the discrimination of said exposure discriminating unit.

13. The image processing apparatus according to claim 12,

further comprising an artificial image discriminating unit which discriminates whether said image data is artificially formed image data or not prior to the discrimination of said exposure discriminating unit,

and wherein when it is determined by said artificial image discriminating unit that said image data is the artificially formed image data, said correction processing unit does not make the luminance correction to said image data.

14. The image processing apparatus according to claim 12, further comprising a same image discriminating unit which discriminates whether said image data is a series of image data constructed by a plurality of data or not,

and wherein if said same image discriminating unit determines that said image data is same banded image data, said image process is executed to the image data obtained by collecting a series of image data.